

Invention I, encompassing claims 23-30, 39-44, and 54, "drawn to methods of killing or inhibiting growth of bacteria, classified in Class 514, subclasses 2 and 44";

Invention II, encompassing claims 31-38, "drawn to processes for determining the function of a target gene in a bacteria, classified in Class 435, subclass 6"; and

Invention III, encompassing claims 45-53, "drawn to antibacterial pharmaceutical compositions, classified in Class 530, subclass 300."

(Office Action at pages 2-3).

The Office Action alleges that each of the inventions is distinct because, *inter alia*, "the PNA compositions of Group I may be utilized in assays of hybridization probes or, alternatively, in the distinct usages of Groups I and II, each being a separate and non-overlapping usage of such PNA compositions" (Office Action at page 3).

The Office Action further requires the election of a single disclosed species from each of the following: (1) *in vivo* **or** *in vitro* PNA action and (2) PNA alone **or** plus additional antibiotic(s) presence.

Applicants provisionally elect herein Group I encompassing claims 23-30, 39-44, and 54, "drawn to methods of killing or inhibiting growth of bacteria, classified in Class 514, subclasses 2 and 44." Applicants provisionally elect *in vitro* PNA action (Species A-2) from the patentably distinct species set forth in claims 23-25 and 27-29. Of the claims comprising elected Group I, claims 23-30, 43-44, and new claims 55-56 read on *in vitro* PNA action. Additionally, Applicants provisionally elect use of PNA plus additional antibiotic(s) (Species B-2) from the patentably distinct species set forth in claims 23-25 and 27-29. Of the claims comprising elected Group I, claims 23-30, 39-44, 54, and new claims 55-56 read on use of PNA plus additional antibiotic(s) presence.

Notwithstanding the foregoing, Applicants respectfully submit that examining more than one group would not impose a serious burden on the Examiner.

**Sequence Listing**

A Notice to Comply With Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures dated September 13, 2001 has been sent by the Patent Office as part of a communication from the Examiner in charge of the application. In that Notice, Applicants were required to correct certain errors in the Sequence Listing and to provide copies of the Sequence Listing in Computer Readable and paper form with a statement that the contents of the paper and Computer Readable Sequence Listings are the same.


Applicants provide herewith substitute sheets to insert an updated and amended paper copy of the Sequence Listing together with a copy of the updated and amended Sequence Listing in Computer Readable Form. Applicants have amended the sequence descriptions to address the errors identified by the Patent Office. In addition, Applicants provide required statements associated with the submission of new paper and Computer Readable copies of Sequence Listings.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned **“Version with markings to show changes made.”**

The examination of these claims and passage to allowance are respectfully requested. An early Notice of Allowance is therefore earnestly solicited. Applicants

invite the Examiner to contact the undersigned at (215) 564-8338 to clarify any unresolved issues raised by this response.

Respectfully submitted,

  
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Date: *October 15, 2001*

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Attachments:

"Version with markings to show changes made"  
Paper Copy of Sequence Listing (pages 1-14)  
Computer Readable Copy of Sequence Listing  
Statement to Support

**VERSION WITH MARKINGS TO SHOW CHANGES MADE****In the Claims:**

Please add new claims 55 and 56 as follows:

55. (New) The method of claim 23 further comprising the step of identifying bacteria to be killed or inhibited.

56. (New) The method of claim 23 wherein the killing or inhibiting of bacteria growth is examined after said bacteria are contacted with said peptide nucleic acid.